



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/708,109	11/03/2000	Scott Nedderman	17200-074US1	9251
54205 7590 02/04/2008 CHADBOURNE & PARKE LLP 30 ROCKEFELER PLAZA NEW YORK, NY 10112			EXAMINER KANG, INSUN	
			ART UNIT 2193	PAPER NUMBER
			MAIL DATE 02/04/2008	DELIVERY MODE PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

## Office Action Summary

Application No.

09/708,109

Applicant(s)

NEDDERMAN, SCOTT

Examiner

Insun Kang

Art Unit

2193

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 31 October 2007.  
2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.  
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-92 is/are pending in the application.  
4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.  
5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.  
6) ☒ Claim(s) 1-92 is/are rejected.  
7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.  
8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.  
10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119


- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All b) ☐ Some \* c) ☐ None of:  
1. ☐ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)  
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)  
3) ☐ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_

- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_  
5) ☐ Notice of Informal Patent Application  
6) ☐ Other: \_\_\_\_\_

  
WILLIAM WOOD  
PRIMARY EXAMINER

### DETAILED ACTION

1. This action is in response to the amendment filed on 10/31/2007.
2. As per applicant's request, claims 1, 7, 13, 19, 25, 30, 35, 40, 45, 51, 57, 63, 69, 75, 81, and 87 have been amended. Claims 1-92 are pending.

### *Claim Rejections - 35 USC § 103*

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 1-92 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lee et al. (US Patent 6,535,883) herein after referred to as "Lee" in view of Bahrs et al. (US Patent 6,654,932) hereafter Bahrs.

Per claim 1:

Lee discloses:

-receiving information over a communications network ("server computer...confirming data input by a user of the mobile computer," col. 4 lines 5-25)

Lee further discloses retrieving customizable validation rules appropriate for a retriever's capabilities (i.e. col. 3 lines 19-40; col. 4 lines 27-41) and determining computer data validity by applying the retrieved validation rules to the information ("In order to ensure the validity of the data entered by the worker, some or all of the fields will have an associated validation rule... for

performing one or more tests or comparisons on data in one or more fields to make sure the data is valid...The validation rules are loaded ...and validation rules associated with fields in the rules file are associated ...with the corresponding field names in the MPA. The validation rules test the contents of each field entered by the user to ensure that the field is filled out correctly,” col. 2 lines 24-40).

Lee does not explicitly teach retrieving customizable validation rules appropriate for a retriever’s capabilities from a hereditary rules library. Bahrs teaches a hereditary rules library having customizable validation rules was known in the pertinent art, at the time applicant's invention was made, to extend the validation rules (i.e. a class that extends ValidationRule is created in step 3202 in Fig 32; col. 31 lines 49-53). It would have been obvious for one having ordinary skill in the art to modify Lee’s disclosed system to incorporate the teachings of Bahrs. The modification would be obvious because one having ordinary skill in the art would be motivated to reuse validation logic with very little code by using inheritance as taught by Bahrs.

Per claim 2:

The rejection of claim 1 is incorporated, and further, Lee discloses highlighting information determined to be invalid by the validation rules (see Fig 14) .

Per claim 3:

The rejection of claim 1 is incorporated, and further, Lee discloses that the validation rules are provided to a client (“Once created, the validation rules are translated to a rules file 16 (see FIG.

2) and communicated via a wireless network 20 to a mobile computer 30 for use in validating the data entries made by a mobile worker to an associated form,” col. 4 lines 27-41) .

Per claim 4:

The rejection of claim 1 is incorporated, and further, Lee discloses that the validation rules are provided to a server (“Once created, the validation rules are translated to a rules file 16 (see FIG. 2) and communicated via a wireless network 20 to a mobile computer 30 for use in validating the data entries made by a mobile worker to an associated form,” col. 4 lines 27-41) .

Per claim 5:

The rejection of claim 1 is incorporated, and further, Lee discloses that the validation rules are imbedded into a web page (“a set of validation rules for validating data entries made to service provider forms,” col. 4 lines 28-41) .

Per claim 6:

The rejection of claim 1 is incorporated, and further, Lee discloses that the validation rules are executable both on a client and server (“Once created, the validation rules are translated to a rules file 16 (see FIG. 2) and communicated via a wireless network 20 to a mobile computer 30 for use in validating the data entries made by a mobile worker to an associated form,” col. 4 lines 27-41) .

Per claims 7-12, they are the system versions of claims 1-6, respectively, and are rejected for the same reasons set forth in connection with the rejection of claims 1-6 above.

Per claims 13-18, they are the computer executable software code versions of claims 1-6, respectively, and are rejected for the same reasons set forth in connection with the rejection of claims 1-6 above.

Per claims 19-24, they are the apparatus versions of claims 1-6, respectively, and are rejected for the same reasons set forth in connection with the rejection of claims 1-6 above.

Per claim 25:

Lee discloses identifying data types requiring validation (“Sets of validation rules are created for a form interactively, by selecting fields, adding appropriate validation rules to be implemented for the fields, and adding appropriate expressions for the validation rules,” col. 3 lines 19-40) providing customizable validation rules appropriate for a retriever’s capabilities stored in a memory device for the associated data types (i.e. col. 3 lines 19-40; col. 4 lines 27-41).

Lee does not explicitly teach a hereditary rules library. Bahrs teaches a hereditary rules library having customizable validation rules was known in the pertinent art, at the time applicant's invention was made, to extend the validation rules (i.e. a class that extends ValidationRule is created in step 3202 in Fig 32; col. 31 lines 49-53). It would have been obvious for one having ordinary skill in the art to modify Lee’s disclosed system to incorporate the teachings of Bahrs. The modification would be obvious because one having ordinary skill in the art would be motivated to reuse validation logic with very little code by using inheritance as taught by Bahrs.

Per claim 26:

The rejection of claim 25 is incorporated, and further, Lee discloses that the validation rules are provided to a client (“Once created, the validation rules are translated to a rules file 16 (see FIG. 2) and communicated via a wireless network 20 to a mobile computer 30 for use in validating the data entries made by a mobile worker to an associated form,” col. 4 lines 27-41) .

Per claim 27:

The rejection of claim 25 is incorporated, and further, Lee discloses that the validation rules are provided to a server (“Once created, the validation rules are translated to a rules file 16 (see FIG. 2) and communicated via a wireless network 20 to a mobile computer 30 for use in validating the data entries made by a mobile worker to an associated form,” col. 4 lines 27-41) .

Per claim 28:

The rejection of claim 25 is incorporated, and further, Lee discloses that the validation rules are imbedded into a web page (“a set of validation rules for validating data entries made to service provider forms,” col. 4 lines 28-41) .

Per claim 29:

The rejection of claim 25 is incorporated, and further, Lee discloses that the validation rules are executable both on a client and server (“Once created, the validation rules are translated to a rules file 16 (see FIG. 2) and communicated via a wireless network 20 to a mobile computer 30 for use in validating the data entries made by a mobile worker to an associated form,” col. 4 lines 27-41) .

Per claims 30-34, they are the system versions of claims 25-29, respectively, and are rejected for the same reasons set forth in connection with the rejection of claims 25-29 above.

Per claims 35-39, they are the computer executable software code versions of claims 25-29, respectively, and are rejected for the same reasons set forth in connection with the rejection of claims 25-29 above.

Per claims 40-44, they are the apparatus versions of claims 25-29, respectively, and are rejected for the same reasons set forth in connection with the rejection of claims 25-29 above.

Per claim 45

Lee discloses:

- providing a rules library and an initial parent rule stored in a memory device (The menu presents the expressions as expression templates, which are templates for creating and completing an expression,” col. 3 lines 40-54)
- building customizable validation rules appropriate for a plurality of users' capabilities by members of templates (“allows a user to create a validation rule by selecting a template and fill in the blacks,” col. 3 lines 50-54; col. 3 lines 19-40; col. 4 lines 27-41).

Lee does not explicitly teach building customizable validation rules appropriate for a retriever's capabilities by subclassing members of a hereditary rules library class hierarchy. Bahrs teaches it was known in the pertinent art, at the time applicant's invention was made, to extend the validation rules by subclassing from the parent class (i.e. a class that extends ValidationRule is created in step 3202 in Fig 32). It would have been obvious for one having ordinary skill in the art to modify Lee's disclosed system to incorporate the teachings of Bahrs.



The modification would be obvious because one having ordinary skill in the art would be motivated to reuse validation logic with very little code by using inheritance as taught by Bahrs.

Per claim 46:

The rejection of claim 45 is incorporated, and further, Lee discloses storing subclassed validation rules in the rule library (“enables a user to create a set of form validation rules...Once created, the validation rules are translated to a rules file,” col. Lines 29-41) .

Per claim 47:

The rejection of claim 45 is incorporated, and further, Bahrs discloses that the subclassed validation rules inherit validation logic from a parent rule (i.e. a class that extends ValidationRule is created in step 3202 in Fig 32).

Per claim 48:

The rejection of claim 45 is incorporated, and further, Lee discloses that the validation rules are associated with data types (Table 2, col. 11 lines 31-60) .

Per claim 49:

The rejection of claim 45 is incorporated, and further, Lee discloses that the validation rules are imbedded into a web page (“receiving data including the input data from the form submitted to a server,” col. 2 lines 33-40) (“it is determined whether the input data is valid using information stored in the registry,” col. 2 lines 33-44)

Per claim 50:

The rejection of claim 45 is incorporated, and further, Lee discloses that the validation rules are executable both on a client and server (“Once created, the validation rules are translated to a rules file 16 (see FIG. 2) and communicated via a wireless network 20 to a mobile computer 30 for use in validating the data entries made by a mobile worker to an associated form,” col. 4 lines 27-41) .

Per claims 51-56, they are the system versions of claims 45-50, respectively, and are rejected for the same reasons set forth in connection with the rejection of claims 45-50 above.

Per claims 57-62, they are the computer executable software code versions of claims 45-50, respectively, and are rejected for the same reasons set forth in connection with the rejection of claims 45-50 above.

Per claims 63-68, they are the apparatus versions of claims 45-50, respectively, and are rejected for the same reasons set forth in connection with the rejection of claims 45-50 above.

Per claim 69:

Lee discloses:

-marking data types for associated customizable validation rules from a rules library stored in a memory device and providing validation marked data types appropriate for a retriever’s capabilities (col. 3 lines 50-54; col. 3 lines 19-40; col. 4 lines 27-41).

Lee does not explicitly teach that the library is a hereditary rules library. Bahrs teaches a hereditary rules having customizable validation rules was known in the pertinent art, at the time

applicant's invention was made, to extend the validation rules (i.e. a class that extends ValidationRule is created in step 3202 in Fig 32). It would have been obvious for one having ordinary skill in the art to modify Lee's disclosed system to incorporate the teachings of Bahrs. The modification would be obvious because one having ordinary skill in the art would be motivated to reuse validation logic with very little code by using inheritance as taught by Bahrs.

Per claim 70:

The rejection of claim 69 is incorporated, and further, Lee discloses:

- building forms with the validation rules associated with marked data types (col. Lines 29-41) .

Per claim 71:

The rejection of claim 69 is incorporated, and further, Lee discloses storing forms with the validation rules associated with marked data types (col. Lines 29-41) .

Per claim 72:

The rejection of claim 69 is incorporated, and further, Lee discloses providing forms with the validation rules associated with marked data types over a communications network (col. Lines 29-41) .

Per claim 73:

The rejection of claim 69 is incorporated, and further, Lee discloses that the validation rules are imbedded into a web page (col. Lines 29-41).

Per claim 74:

The rejection of claim 69 is incorporated, and further, Lee discloses that the validation rules are executable both on a client and server (col. Lines 29-41) .

Per claims 75-80, they are the system versions of claims 69-74, respectively, and are rejected for the same reasons set forth in connection with the rejection of claims 69-74 above.

Per claims 81-86, they are the computer executable software code versions of claims 69-74, respectively, and are rejected for the same reasons set forth in connection with the rejection of claims 69-74 above.

Per claims 87-92, they are the apparatus versions of claims 69-74, respectively, and are rejected for the same reasons set forth in connection with the rejection of claims 69-74 above.

### ***Response to Arguments***

5. Applicant's arguments filed on 10/31/2007 have been fully considered but they are not persuasive.

The applicant states that the cited references fails to disclose validation rules appropriate based on capabilities of a receiver/provider/user (remark 17).

In response, the customizable validation rules by a user in Lee are provided to a mobile computer for validity test based on capabilities of a receiver/provider/user (i.e. col. 3 lines 19-40; col. 4 lines 27-41). Also, Bahrs discloses extensible validation rules that are separated into another subsystem for central maintainability of the rules and reuse across all other subsystems

(col. 31 lines 49-53). Therefore, the validation rules used in each subsystems are “appropriate for the subsystems’ capabilities and can be extended for reuse.

***Conclusion***

**6. THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

**7.** Any inquiry concerning this communication or earlier communications from the examiner should be directed to Insun Kang whose telephone number is 571-272-3724. The examiner can normally be reached on M-R 6:30-5 PM.


If attempts to reach the examiner by telephone are unsuccessful, the examiner’s supervisor, MENG AI AN can be reached on 571-272-3756. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from

Application/Control Number:  
09/708,109  
Art Unit: 2193

Page 13

either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

I. Kang  
Examiner

  
**WILLIAM WOOD**  
**PRIMARY EXAMINER**